

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A water temperature sensor comprising:

a temperature measuring part for measuring a temperature of water;

a water gauge chamber extending along an outer side of an outer edge of an outer tub of a washing machine; and

a hollow chamber cap located at a bottom edge of the water gauge chamber, the hollow chamber cap having ~~an~~ a flat, disc-shaped upper side ~~which is substantially flat,~~

~~wherein substantially an entire upper surface of the upper side of the hollow cap is exposed to the water in the water gauge chamber, and~~

~~wherein a lower surface of the upper side of the hollow cap is formed with a recess serving as a seating portion, the temperature measuring part being mounted in -said~~ a seating portion of the hollow chamber cap, wherein neither the water gauge chamber nor the hollow chamber cap project below a bottom side of the outer tub.

2. (Previously Presented) The water temperature sensor of claim 1, further comprising a heat insulating material inserted into a hollow space of the hollow chamber cap to achieve an adiabatic effect and to fasten said temperature measuring part within said chamber cap.

3. (Currently Amended) A water temperature sensor comprising:

a temperature measuring part including a temperature detecting sensor for measuring the temperature of water, and signal lines for connecting the temperature detecting sensor with a circuit requiring the measured value; and

a hollow chamber cap fitting into and thereby closing an opened bottom portion of a water gauge chamber, a hollow space of the hollow chamber cap facing downward, the hollow chamber cap having an a flat, disc-shaped upper side ~~which is substantially flat~~,

wherein ~~substantially~~ an entire upper surface of the flat, disc-shaped upper side of the hollow cap is exposed to the water in the water gauge chamber,

~~wherein a lower surface of the upper side of the hollow cap is formed with a recess serving as a seating portion,~~

wherein the temperature measuring part is disposed in ~~said a~~ seating portion of the hollow chamber cap, so that the water temperature is measured without directly contacting with the water.

4. (Previously Presented) The water temperature sensor of claim 3, further comprising a heat insulating material inserted into the hollow space of the hollow chamber cap to achieve an adiabatic effect and to fasten said temperature measuring part within said chamber cap.

5. (Currently Amended) A water temperature sensor comprising:

a temperature measuring part including a temperature detecting sensor for measuring the temperature of water, signal lines for connecting the temperature detecting sensor with a circuit requiring the measured value, and a cylindrical probe containing the temperature detecting sensor and the signal lines;

an outer tub of a washing machine having a bottom that is substantially flat, a side that is substantially cylindrical in shape, and a ~~tapered~~ truncated conical-shaped portion between the bottom and the side;

a water gauge chamber extending along a portion of an outer surface of the cylindrical-shaped side and the ~~tapered~~ truncated conical-shaped portion of the outer tub; ; and

a hollow chamber ~~cap~~ cap located on a bottom edge of the water gauge chamber ~~and overlapping the tapered portion in a position such that an upper surface of the hollow chamber cap makes no contact with the cylindrical side or the truncated conical-shaped portion~~ of the outer tub,

wherein a cylindrical probe of the temperature measuring part extends upward from within the hollow chamber cap through a hole at a center of the hollow chamber cap, thereby directly contacting a washing water in the water gauge chamber after penetrating the hole.

6. (Previously Presented) The water temperature sensor of claim 5, further comprising a heat insulating material inserted into a hollow space of the hollow chamber cap to achieve an adiabatic effect and to fasten said temperature measuring part within said chamber cap.

7. (Canceled)

8. (Previously Presented) The water temperature sensor of claim 1, wherein the hollow chamber cap is welded to the bottom edge of the water gauge chamber.

9. (Currently Amended) The water temperature sensor of claim 1, wherein the outer tub is formed with a cylindrical upper portion and a truncated conical-shaped ~~a lower portion of a side of the outer tub is the~~ truncated conical-shaped portion being tapered inwardly toward a bottom of the outer tub, and the hollow chamber cap overlaps the ~~is separated from a~~ lower edge of the cylindrical upper portion by a vertical length of the truncated conical-shaped portion tapered inwardly.

10. (Previously Presented) The water temperature sensor of claim 1, wherein the hollow chamber cap is formed of plastic.